

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

*bacterial gene*

Listing of Claims:

1-6.: canceled.

7. (Currently amended) An attenuated *Pasteurellaceae* bacteria comprising a mutation in the *atpG* protein coding region of an *atpG* gene as set forth in SEQ ID NO: 3 or a species homolog thereof, said mutation resulting in decreased *atpG* biological activity, wherein the decreased *atpG* biological activity attenuates the *Pasteurellaceae* bacteria.

8. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein the decreased *atpG* biological activity is decreased due to the mutation resulting in decreased *atpG* gene product expression of an *atpG* gene product encoded by the mutated *atpG* protein coding region.

9. (Previously presented) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in expression of an inactive *atpG* gene product encoded by the mutated *atpG* protein coding region.

10. (Previously presented) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in deletion of all or part of said *atpG* gene.

11. (Previously presented) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in deletion of at least about 10%, at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99% of said *atpG* gene.

12. (Currently amended) The *Pasteurellaceae* bacteria of claim 7 wherein said mutation results in an insertion in the *atpG* gene, said insertion causing decreased expression of [[a]] an *atpG* gene product encoded by the mutated *atpG* protein coding region and/or expression of an inactive *atpG* gene product encoded by the mutated *atpG* protein coding region.

13. (Original) The *Pasteurellaceae* bacteria of claim 7 selected from the group consisting of *Pasteurella haemolytica*, *Pasteurella multocida*, *Actinobacillus pleuropneumoniae* and *Haemophilus somnis*.

14. (Currently amended) The *Pasteurellaceae* bacteria of claim 13 wherein the decreased atpG biological activity is due to the mutation resulting in decreased atpG gene product expression of an atpG gene product encoded by the mutated atpG protein coding region.

15. (Previously presented) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in expression of an inactive atpG gene product encoded by the mutated atpG protein coding region.

16. (Previously presented) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in deletion of all or part of said atpG gene.

17. (Previously presented) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in deletion of at least about 10%, at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99% of said atpG gene.

18. (Previously presented) The *Pasteurellaceae* bacteria of claim 13 wherein said mutation results in an insertion in the atpG gene, said insertion causing decreased expression of an atpG gene product encoded by the mutated atpG protein coding region and/or expression of an inactive atpG gene product encoded by the mutated atpG protein coding region.

19. (Original) The attenuated *Pasteurellaceae* bacteria of claim 13 that is a *P. multocida* bacteria.

20. (Currently amended) The *Pasteurellaceae* bacteria of claim 19 wherein the decreased atpG biological activity is decreased due to the mutation resulting in decreased atpG gene product expression of an atpG gene product encoded by the mutated atpG protein coding region.

21. (Previously presented) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in expression of an inactive atpG gene product encoded by the mutated atpG protein coding region.

22. (Previously presented) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in deletion of all or part of said atpG gene.

23. (Previously presented) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in deletion of at least about 10%, at least about 20%, at least about 30%, at least about 40% at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, at least about 98%, or at least about 99% of said atpG gene.

24. (Previously presented) The *Pasteurellaceae* bacteria of claim 19 wherein said mutation results in an insertion in the gene, said insertion causing decreased expression of an atpG gene product encoded by the mutated atpG protein coding region gene and/or expression of an inactive atpG gene product encoded by the mutated atpG protein coding region.

25-30. (Canceled)

31. (Previously presented) An immunogenic composition comprising the bacteria according to any one of claims 7-24.

32-51. (Canceled)